IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A liquid injector for injecting at least a liquid into a subject with injection performing means, comprising:

a touch panel that displays data and accepts input actions;

image displaying means for displaying a plotting chart image having a vertical axis and a horizontal axis on the touch panel;

graph entering means for accepting an input action for an operator to ~~draw~~ enter an injection graph by drawing the injection graph having chronologically changing injecting conditions in a form of a free curve, a plurality of straight lines, a plurality of passing points, or a plurality of rectangular regions directly into the displayed plotting chart image on the touch panel;

graph storing means for storing data of the entered injection graph;

graph displaying means for displaying an image of the entered injection graph whose data is stored on said displayed plotting chart image on the touch panel; and

injection control means for controlling operation of said injection performing means in real-time according to said entered injection graph.

Claim 2 (Original): A liquid injector according to claim 1, further comprising:

time measuring means for measuring a time which has elapsed from at least a start of injection of the liquid;

said image displaying means comprising means for displaying said plotting chart image whose vertical axis represents liquid injection rates and horizontal axis represents liquid injection times;

said graph entering means comprising means for accepting an input action to enter said injection graph which represents a liquid injection rate at each liquid injection time into said plotting chart image; and

said injection control means comprising means for controlling operation of said injection performing means in real-time according to the measured time and said entered injection graph.

Claim 3 (Withdrawn): A liquid injector according to claim 1, further comprising:

time measuring means for measuring a time which has elapsed from at least a start of injection of the liquid;

said image displaying means comprising means for displaying said plotting chart image whose vertical axis represents quantities to be injected of the liquid and horizontal axis represents liquid injection times;

said graph entering means comprising means for accepting an input action to enter said injection graph which represents a quantity of the liquid to be injected at each liquid injection time into said plotting chart image; and

said injection control means comprising means for controlling operation of said injection performing means in real-time according to the measured time and said entered injection graph.

Claim 4 (Withdrawn): A liquid injector according to claim 1, further comprising:

quantity detecting means for detecting an injected quantity of the liquid from at least a start of injection of the liquid;

said image displaying means comprising means for displaying said plotting chart image whose vertical axis represents liquid injection rates and horizontal axis represents quantities to be injected of the liquid;

said graph entering means comprising means for accepting an input action to enter said injection graph which represents a liquid injection rate at each quantity of the liquid to be injected into said plotting chart image; and

said injection control means comprising means for controlling operation of said injection performing means in real-time according to the detected injected quantity and said entered injection graph.

Claim 5 (Withdrawn): A liquid injector according to claim 2, further comprising:

quantity calculating means for calculating an injected quantity of the liquid as the area of a chart portion between said injection graph and said horizontal axis; and

quantity displaying means for displaying data of the calculated injected quantity of the liquid.

Claim 6 (Withdrawn/Previously Presented): A liquid injector according to claim 1, wherein said graph entering means comprises means for entering said free curve as said injection graph;

said graph displaying means comprising means for displaying said injection graph as said free curve.

Claim 7 (Withdrawn/Previously Presented): A liquid injector according to claim 1, wherein said graph entering means comprises means for entering said plurality of straight lines as said injection graph;

said graph displaying means comprising means for displaying said injection graph as said plurality of straight lines.

Claim 8 (Withdrawn/Previously Presented): A liquid injector according to claim 1, wherein said graph entering means comprises means for entering said plurality of straight lines as said injection graph, said liquid injector further comprising:

graph converting means for converting data of the straight lines as said injection graph into data of a free curve;

said graph storing means comprising means for storing data of said injection graph as converted into said free curve;

said graph displaying means comprising means for displaying said injection graph as said free curve; and

said injection control means comprising means for controlling operation of said injection performing means according to said injection graph as said free curve.

Claim 9 (Withdrawn/Previously Presented): A liquid injector according to claim 1, wherein said graph entering means comprises means for entering said plurality of passing points as said injection graph, said liquid injector further comprising:

graph converting means for generating data of a plurality of straight lines produced by successively joining said passing points, as said injection graph;

said graph storing means comprising means for storing the generated data of said injection graph;

said graph displaying means comprising means for displaying said injection graph as said successive straight lines; and

said injection control means comprising means for controlling operation of said injection performing means according to said injection graph as said successive straight lines.

Claim 10 (Withdrawn/Previously Presented): A liquid injector according to claim 1, wherein said graph entering means comprises means for entering said plurality of passing points as said injection graph, said liquid injector further comprising:

graph converting means for generating data of a free curve successively passing through said passing points, as said injection graph;

said graph storing means comprising means for storing the generated data of said injection graph;

said graph displaying means comprising means for displaying said injection graph as said free curve; and

said injection control means comprising means for controlling operation of said injection performing means according to said injection graph as said free curve.

Claim 11 (Withdrawn/Previously Presented): A liquid injector according to claim 1, wherein said graph entering means comprises means for entering said plurality of rectangular regions as said injection graph, and said graph displaying means comprises means for displaying said injection graph as said rectangular regions.

Claim 12 (Withdrawn/Previously Presented): A liquid injector according to claim 5, wherein said graph entering means comprises means for entering said plurality of rectangular regions as said injection graph;

said graph displaying means comprising means for displaying said injection graph as said rectangular regions on said plotting chart image;

said quantity calculating means comprising means for calculating the injected quantity of the liquid as the area of each of said rectangular regions; and

said quantity displaying means comprising means for displaying the calculated injected quantity for each of said rectangular regions.

Claim 13 (Withdrawn): A liquid injector according to claim 10, wherein said graph entering means comprises means for entering input actions to vertically move an upper side of each of said rectangular regions and to horizontally move a right side of each of said rectangular regions.

Claim 14 (Original): A liquid injector according to claim 1, wherein said graph entering means comprises means for entering a period for interrupting the injection of the liquid into the displayed injection graph, and said injection control means comprising means for temporarily inactivating said injection performing means.

Claim 15 (Original): A liquid injector according to claim 14, further comprising:

situation displaying means for displaying a remaining time of said period for interrupting the injection of the liquid, together with said injection graph, in real-time on said graph displaying means.

Claim 16 (Withdrawn): A liquid injector according to claim 1, further comprising:

situation displaying means for displaying an injecting situation of said injection performing means, together with said injection graph, in real-time on said graph displaying means.

Claim 17 (Canceled).

Claim 18 (Withdrawn/Previously Presented): A liquid injector according to claim 1, further comprising:

an injection head for removably holding a liquid syringe which comprises a cylinder filled with at least said liquid and a piston slidably inserted in said cylinder;

said injection performing means comprising means for moving said cylinder and said piston relatively to each other while said liquid syringe is being held by said injection head; and

said touch panel being connected to said injection head parallel thereto.

Claim 19 (Withdrawn): A liquid injector according to claim 1, further comprising:

image storage means for storing data of schematic images of a plurality of body sections of the human body and schematic images of a plurality of regions to be imaged of the human body in association with each other;

section display means for displaying the schematic images of the body sections in the shape of a human body;

section input means for accepting an input action to select one of the displayed schematic images of the body sections;

region displaying means for displaying the schematic image of at least one of said regions to be imaged in relation to the selected schematic image of the body section; and

region input means for accepting an input action to select the displayed schematic image of at least one of said regions to be imaged;

said injection performing means comprising means for injecting at least a contrast medium as said liquid into said subject whose fluoroscopic image is to be captured by an imaging diagnostic apparatus;

said graph entering means comprising means for entering said injection graph for each of said regions to be imaged of the human body;

said graph storing means comprising means for storing data of said injection graph for each of said regions to be imaged; and

said injection control means comprising means for controlling operation of said injection performing means according to the injection graph for the selected region to be imaged.

Claim 20 (Withdrawn): A liquid injector according to claim 1, wherein said injection performing means comprises a medium injection mechanism for injecting a contrast medium as said liquid and a solution injection mechanism for injecting a saline solution as said liquid;

said graph entering means comprising means for entering injection graphs for said contrast medium and said saline solution which share liquid injection times; and

said injection control means comprising means for controlling operation of said medium injection mechanism and said solution injection mechanism in an interlinked fashion according to said injection graphs for said contrast medium and said saline solution.

Claims 21-29 (Canceled).

Claim 30 (Previously Presented): A liquid injector accordingly to claim 1, further comprising:

region displaying means for displaying at least one schematic image of at least one of regions to be imaged of the human body on the touch panel; and

region input means for accepting an input action to select the displayed schematic image of the region to be imaged;

said graph entering means comprising means for entering said injection graph for each of the regions to be imaged;

said graph storing means comprising means for storing data of said injection graph for each of the regions to be imaged; and

said injection control means comprising means for controlling operation of said injection performing means according to the injection graph for the selected region to be imaged.

Claim 31 (Previously Presented): A liquid injector according to claim 30, further comprising:

section displaying mans for displaying schematic images of body sections in a shape of a human body on the touch panel;

section input means for accepting an input action to select one of the displayed schematic images of the body sections; and

said region displaying means displays the schematic image of the regions to be imaged in relation to the selected schematic image of the body section.